



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/585,002

06/29/2006

Shinji Hotta

2006\_0984A

4959

513 7590 09/29/2008  
WENDEROTH, LIND & PONACK, L.L.P.  
2033 K STREET N. W.  
SUITE 800  
WASHINGTON, DC 20006-1021

EXAMINER

ANGLO, LHEIREN MAE ACOSTA

ART UNIT

PAPER NUMBER

2832

MAIL DATE

DELIVERY MODE

09/29/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/585,002

**Applicant(s)**

HOTTA ET AL.

**Examiner**

LHEIREN MAE A. ANGLO

**Art Unit**

2832

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 45-63 is/are pending in the application.
- 4a) Of the above claim(s) 54-57, 62 and 63 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 45-53 and 57-61 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 20060629
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election without traverse of Embodiment 1, corresponding to claims 45-53 and 57-61 and Figure 1 in the reply filed on May 19, 2008 is acknowledged.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 45,46,49,53,57,58 and 60 are rejected under 35 U.S.C. 102(b) as being anticipated by Saito et al. [Saito hereinafter, US 6,373,008].

In regard to claim 45, Saito teaches in [Figs. 1 and 2] an EL sheet [A] comprising: a counter electrode layer [4]; a dielectric layer [3]; a light-emitting layer[2]; a transparent electrode layer [1] made of an electroconductive polymer; and a sheet base member [5], wherein a light-transmitting adhesive layer [col. 4, lines 4+] excellent in adhesiveness to the electroconductive polymer is disposed between the transparent electrode layer made of the electroconductive polymer and the light-emitting layer.

In regard to claim 46, Saito teaches in [Fig. 1 and col. 4, lines 4+] that a light-transmitting adhesive layer excellent in adhesiveness to the electroconductive polymer is further disposed between the transparent electrode layer made of the electroconductive polymer and the sheet base member.

In regard to claim 49, Saito teaches in [col. 4, lines 4+] that fluororesin is used as a binder for at least one of the dielectric layer and the light-emitting layer.

In regard to claim 53, Saito teaches in [Figs. 1,2 and 13] a member for lighting a push-button switch [10] comprising: a portion of the EL sheet being formed into a convex shape projecting from a rear side near the counter electrode layer to a top side near the transparent electrode layer; and a core material having a key top shape being filled into a concave portion of the rear side of the convex shape.

In regard to claim 57, Saito teaches in [Figs. 1 and 2] an EL sheet comprising: a counter electrode layer [4]; a dielectric layer [3]; a light-emitting layer [2]; a transparent electrode layer [1] made of an electroconductive layer; and a sheet base member [5], wherein a binder [col. 4, lines 4+] for the light-emitting layer is different from that of the dielectric layer and excellent in adhesiveness to the electroconductive polymer.

In regard to claim 58, Saito teaches in [Figs. 1 and 2] that a light-transmitting adhesive layer [col. 4, lines 4+] excellent in adhesiveness to the electroconductive polymer is disposed between the transparent electrode layer made of the electroconductive polymer and the sheet base member.

In regard to claim 60, Saito teaches in [col. 4, lines 4+] that fluororesin is used as a binder for at least one of the dielectric layer and the light-emitting layer.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 47,48,50-52,59 and 61 rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al. [Saito hereinafter, US 6,373,008].

In regard to claim 47, Saito teaches in [Figs. 1 and 2] an EL sheet comprising: a counter electrode layer [4]; a dielectric layer [3]; a light-emitting layer [2]; a transparent electrode layer [1 ]made of an electroconductive polymer; and a sheet base member [5], wherein at least one resin-base binder [col. 4, lines 4+] is disposed between the transparent electrode layer made of electroconductive polymer and the light-emitting layer. Saito discloses the claimed invention except for having the resin-base binder be selected from a group consisting of a polyester-base binder, an acrylic binder, a cyanoacrylate-base binder and an ethylene-vinyl acetate-base binder or a synthetic rubber-base binder represented by urethane. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide a resin-base binder selected from a group of those materials, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

In regard to claim 48, Saito teaches in [Fig. 1] at least one resin-base binder [col. 4, lines 4+] is further disposed between the transparent electrode layer made of

electroconductive polymer and the sheet base member. Saito does not teach that the resin-base binder is selected from a group consisting of a polyester-base binder, an acrylic binder, a cyanoacrylate-base binder and an ethylene-vinyl acetate-base binder or a synthetic rubber-base binder represented by urethane. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide a resin-base binder selected from a group of those materials, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

In regard to claim 50, Saito teaches in [Fig. 1 and col. 4, lines 4+] a binder for the light-emitting layer and a fluororesin as a binder for the dielectric layer. Saito does not teach that a polyester-base resin or an acrylic resin is used as a binder for the light-emitting layer. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide a polyester-base resin or an acrylic resin as a binder, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

In regard to claims 51 and 61, Saito teaches in [Fig. 1 and col. 4, lines 4+] the EL sheet according to claim 45 as well as a material disposed between the layers. Saito does not teach that the material is an ion-exchange material. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide an ion exchange material, since it has been held to be within the general skill of a worker in the art to select a

known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

In regard to claim 52, Saito teaches in [Fig. 1 and col. 4, lines 4+] that a fluororesin is used as a binder for the dielectric layer and that a material is disposed in the layers. Saito does not teach that a polyester-base resin or an acrylic resin is used as a binder for the light-emitting layer, and an ion-exchange material is dispersed in at least one of the counter electrode layer, the dielectric layer, the light-emitting layer, the transparent electrode layer made of electroconductive polymer and the light-transmitting adhesive layer. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide a polyester-base resin or an acrylic resin as a binder for the light-emitting layer and an ion exchange material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

In regard to claim 59, Saito teaches in [Fig. 1 and col. 4, lines 4+] a binder for the light-emitting layer. Saito does not teach that the binder for the light-emitting layer is at least one resin-base binder selected from a group consisting of a polyester-base binder, an acrylic binder, a cyanoacrylate-base binder and an ethylene-vinyl acetate-base binder, or a synthetic rubber-base binder represented by urethane. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide a binder for the light-emitting layer is at least one resin-base binder selected from the group of those materials, since it has been held to be within the general skill of a worker in the art to select a known material on the

basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LHEIREN MAE A. ANGLO whose telephone number is (571)272-2730. The examiner can normally be reached on Monday to Friday 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Elvin G Enad/  
Supervisory Patent Examiner, Art Unit 2832

Lheiren Mae A. Anglo

/L. A. A./



Application/Control Number: 10/585,002

Page 8

Art Unit: 2832

Examiner, Art Unit 2832